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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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EXAMINER

ABRAHAM, ESAW T

ART UNIT PAPER NUMBER

2133

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/041,040

Applicant(s)

SOLOMON ET AL.

Examiner

Esaw T. Abraham

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 15-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 15-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's argument, see Pre-Appeal brief request pages 1-4, filed on 11/17/05 with respect to the rejections of claims 1-13 and 15-24 under 35 U.S.C. 102(b) as being anticipated by Doiron (U.S. PN: 5,968,197) have been fully considered and are persuasive. Therefore, the final rejection has been withdrawn. However, upon further consideration, a new ground of rejection is made Doiron (U.S. PN: 5,968,197) in view of Dunning (U.S. PN: 6,760,307).

1. Claims **1-13 and 15-24** remains pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere CO.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

2. Claim 1-13 and 15-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doiron (U.S. PN: 5,968,197) in view of Dunning et al. (U.S. PN: 6,760,307).

As per claims 1, 7, 13 and 18:

Doiron in figure 1 teaches or discloses a data communications network which includes a sending unit (12) for sending packets of data over a network bus (16) to a receiving unit (14) whereby both units include transceivers (24) and (30) for communicating packet information over the network bus 16. Doiron, further teaches an automatic repeat request (ARQ) protocol is employed between sender and receiver so that when a data unit is received correctly by the receiving unit, the receiving unit transmits an acknowledgment (ACK) back to the sending unit and if the data unit is received incorrectly (unsuccessfully) and cannot be correctly reconstructed, the receiving unit transmits a negative acknowledgment (NAK) to the sending unit (see col. 4, last paragraph and figure 2 steps 40-44). Doiron does not explicitly teach a transmitting device that does not expect a completion acknowledgment for a request transaction. **Doiron does not explicitly teach** or disclose that the sender or the transmitter does not expect an acknowledgment of a successful or unsuccessful completion. **However**, Dunning in an analogous art teaches that a system implements flow control between two endpoints 1, 2 which will yield better bandwidths for link efficiency than a traditional credit based flow control—a credit base scheme stops sending packets when all credits are used up, and transmission cannot resume until additional credits are received and further the system continues sending data until the

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receiver sends a NAK, at which time the transmitter restarts at the point at which the receiver indicated the NAK (see col. 5, lines 21-41) which is basically the same method as the applicant's claim because the system of Dunning sends packets without expecting any acknowledgment until the receiver sends a NAK. **Therefore**, it would have been obvious to a person having an ordinary skill in the art at the time the invention was made to implement the teachings of Doirons system having a transmitter that sends data and receives negative message when an error exists in the receiving unit as taught by Dunning. **This modification** would have been obvious because a person having ordinary skill in the art would have been motivated in order to provide a working network with a flow control mechanism that do not allow for lost data due to congestion or transient bit errors due to internal or external system noise (see col. 3, lines 35-40).

As per claims 2-3, 8-9, 19 and 20:

Doiron in view of Dunning teach all the subject matter claimed in claim 1, 7, 13 and 18 including Doiron in figure 3A teaches a data format where data is sent in units and the message may begin with a header portion of bits allocated to any number of functions including start of a data message, sender and/or receiver address information, length of the message, etc (see col. 5, last paragraph).

As per claims 4, 10, 17 and 21:

Doiron in view of Dunning teach all the subject matter claimed in claim 1, 7, and 13 including Doiron teach that the receiving unit transmits an acknowledgment (ACK) back to the sending unit and if the data unit is received incorrectly (unsuccessfully) and

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cannot be correctly reconstructed, the receiving unit transmits a negative acknowledgment (NAK) to the sending unit (see col. 4, last paragraph and figure 2 steps 40-44).

As per claims 5, 11, 15 and 22:

Doiron in view of Dunning teach all the subject matter claimed in claim 1, 7, 13 and 18 including Doiron teach that the receiving unit transmits an acknowledgment (ACK) back to the sending unit and if the data unit is received incorrectly or received undefined error messages and cannot be correctly reconstructed, the receiving unit transmits a negative acknowledgment (NAK) to the sending unit (see col. 4, last paragraph and figure 2 steps 40-44).

As per claims 6, 12, 16, 23 and 24:

Doiron in view of Dunning teach all the subject matter claimed in claim 1, 7, 13 and 18 including Doiron teach that the receiving unit transmits an acknowledgment (ACK) back to the sending unit and if the data unit is received incorrectly or received malformed error messages and cannot be correctly reconstructed, the receiving unit transmits a negative acknowledgment (NAK) to the sending unit (see col. 4, last paragraph and figure 2 steps 40-44).

Conclusion

3. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Esaw Abraham whose telephone number is (571) 272-3812. The examiner can normally be reached on M-F 8-5.


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If attempts to reach the examiner by telephone are successful, the examiner's supervisor, Albert DeCady can be reached on (571) 272-3819. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300.

Information regarding the status of an Application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or PUBLIC PAIR. Status information for unpublished applications is available through Private Pair only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Esaw Abraham
Esaw Abraham

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GUY LAMARRE
PRIMARY EXAMINER